MIAMI-DADE COUNTY
DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

Powers Steel, Inc.
4118 E. Elwood Street
Phoenix, AZ 85040

SCOPE:
This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER- Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Power Box Lintels

APPROVAL DOCUMENT: Drawing #0205-16, titled " Power Box Lintel ", sheets 1 through 3 of 3, prepared by S. E. Consultants, Inc., dated February 2016, signed and sealed by Steven W. Schaub, P.E., on July 20, 2016, bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each lintel shall bear a permanent label with the manufacturer's name or logo and the Miami-Dade County logo.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **revises & renews NOA # 12-0501.02** and consists of this page 1, evidence submitted pages E-1, E-2 & E-3 as well as approval document mentioned above.
The submitted documentation was reviewed by **Helmy A. Makar, P.E., M.S.**

MIAMI-DADE COUNTY APPROVED

Helmy A. Makar
09/08/2016

NOA No 16-0418.05
Expiration Date: 12/28/2021
Approval Date: 09/08/2016

Powers Steel, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #06-0619.01

A. DRAWINGS

1. *Drawing No. 1, titled " Power Box Lintel ", sheets 1 through 3 of 3, prepared by S. E. Consultants, Inc., dated December 06, 2006, signed and sealed by Steven W. Schaub, P.E.*

B. TESTS

1. *Test report on flexural testing on Power Box Lintels Filled Models, per ASTM C-293, prepared by Certified Testing Laboratories, Report No. CTL 05028, dated 11/15/2005, signed and sealed by Ramesh Patel, P.E.*
2. *Test report on flexural testing on Power Box Lintels Filled Models, per ASTM C-293, prepared by Certified Testing Laboratories, Report No. CTL 05028, dated 12/22/2005, signed and sealed by Ramesh Patel, P.E.*

C. CALCULATIONS

1. *Calculations for Powers Steel Lintels, dated 05/15/2006, 543 pages, prepared by S. E. Consultants, Inc., signed and sealed by Steven W. Schaub, P.E.*
2. *Calculations for Powers Steel Lintels, dated 11/01/2006, 192 pages, prepared by S. E. Consultants, Inc., signed and sealed by Steven W. Schaub, P.E.*

D. QUALITY ASSURANCE

1. *By Miami-Dade Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *Mill Certified Inspection Report, dated September 15, 2005, for concrete by Rinker Materials.*

F. OTHER

1. *Quality Control Manual for Powers Box Lintels.*

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 09-0630.06

A. DRAWINGS

1. *Drawing No. 1, titled " Power Box Lintel ", sheets 1 through 3 of 3, prepared by S. E. Consultants, Inc., dated October 2006, signed and sealed by Steven W. Schaub, P.E., on August 23, 2011.*

Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No 16-0418.05
Expiration Date: 12/28/2021
Approval Date: 09/08/2016

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

1. By Miami-Dade Building and Neighborhood Compliance Department (BNC).

E. MATERIAL CERTIFICATIONS

1. None.

3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 12-0501.02

A. DRAWINGS

1. Drawing No. 1, titled " Power Box Lintel ", sheets 1 through 3 of 3, prepared by S. E. Consultants, Inc., dated October 08, 2012, signed and sealed by Steven W. Schaub, P.E., on October 08, 2012.

B. TESTS

1. Test report on flexural testing on Power Box Lintels Filled Models, per ASTM C-293, prepared by Certified Testing Laboratories, Report No. CTLA 1942W, dated 03/30/2009, signed and sealed by Ramesh Patel, P.E.

2. Test report on flexural testing on Power Box Lintels Filled Models, per ASTM C-293, prepared by Certified Testing Laboratories, Report No. CTLA 1942-1, dated 03/30/2009, signed and sealed by Ramesh Patel, P.E.

3. Test report on flexural testing on Power Box Lintels Filled Models, per ASTM C-293, prepared by Certified Testing Laboratories, Report No. CTLA 1942-2, dated 03/30/2009, signed and sealed by Ramesh Patel, P.E.

C. CALCULATIONS

1. Calculations for Powers Steel Lintels, dated 04/11/2012, 119 pages, prepared by S. E. Consultants, Inc., signed and sealed by Steven W. Schaub, P.E.

D. QUALITY ASSURANCE

1. By Miami-Dade County Department of Regulatory and Economic Resources.

E. MATERIAL CERTIFICATIONS

1. None.

Hetmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No 16-0418.05
Expiration Date: 12/28/2021
Approval Date: 09/08/2016

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

4. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing #0205-16, titled " Power Box Lintel ", sheets 1 through 3 of 3, prepared by S. E. Consultants, Inc., dated February 2016, signed and sealed by Steven W. Schaub, P.E., on July 20, 2016.

B. TESTS

1. None.

C. CALCULATIONS

1. Calculations for Powers Steel Lintels, dated 02/2016, 93 pages, prepared by S. E. Consultants, Inc., signed and sealed by Steven W. Schaub, P.E.

D. QUALITY ASSURANCE

1. By Miami-Dade County Department of Regulatory and Economic Resources.

E. MATERIAL CERTIFICATIONS

1. None.

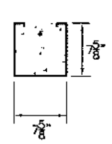
Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No 16-0418.05
Expiration Date: 12/28/2021
Approval Date: 09/08/2016

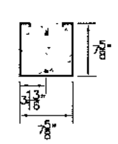
PSbox8MD-II Lintels

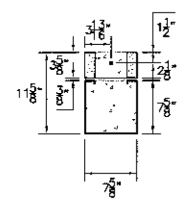
8" inch block width (20ga. < 16'-0" span)
LINTEL LOAD TABLE (IN POUNDS PER LINEAL FOOT) (16ga. >= 16'-0" span)
Gravity Load Table 3000 psi grout
— **ALL LOADS ARE SUPERIMPOSED** —

SPAN (ft)	PSbox 8-8" #5 top	PSbox 8-8" #5 top&bot	PSbox 8-12" #5 top	PSbox 8-12" #5 top&bot	PSbox 8-14" #5 top	PSbox 8-14" #5 top&bot	PSbox 8-16" #5 top	PSbox 8-16" #5 top&bot	PSbox 8-20" #5 top	PSbox 8-20" #5 top&bot	PSbox 8-24" #5 top	PSbox 8-24" #5 top&bot	PSbox 8-32" #5 top	PSbox 8-32" #5 top&bot	SPAN (ft)
1'-6"	5568	5568	7369	7369	8269	8269	9170	9170	10971	10971	12772	12772			1'-6"
2'-2"	3836	3836	5074	5074	5694	5694	6313	6313	7551	7551	8789	8789			2'-2"
2'-8"	3106	3106	4107	4107	4607	4607	5107	5107	6108	6108	7109	7109			2'-8"
3'-2"	2606	2606	3444	3444	3864	3864	4283	4283	5121	5121	5960	5960	7636	7636	3'-2"
4'-0"	2051	2051	2709	2709	3038	3038	3366	3366	4024	4024	4682	4682	5998	5998	4'-0"
4'-6"	1816	1816	2398	2398	2689	2689	2980	2980	3561	3561	4143	4143	5306	5306	4'-6"
5'-2"	1574	1574	2077	2077	2329	2329	2580	2580	3083	3083	3586	3586	4592	4592	5'-2"
6'-2"	1291	1309	1726	1726	1935	1935	2143	2143	2560	2560	2977	2977	3811	3811	6'-2"
7'-0"	989	1146	1510	1510	1692	1692	1874	1874	2238	2238	2602	2602	3330	3330	7'-0"
8'-0"	743	996	1311	1311	1468	1468	1625	1625	1940	1940	2255	2255	2885	2885	8'-0"
9'-2"	552	827	1133	1133	1268	1268	1404	1404	1675	1675	1946	1946	2489	2489	9'-2"
10'-0"	454	686	924	990	1135	1125	1260	1260	1515	1515	1770	1770	2263	2263	10'-0"
11'-2"	352	538	650	814	949	935	1058	1058	1313	1313	1567	1567	2003	2003	11'-2"
12'-0"	297	458	558	670	816	807	914	914	1180	1180	1446	1446	1848	1848	12'-0"
12'-8"	261	405	511	565	705	767	853	879	1107	1120	1361	1361	1738	1738	12'-8"
13'-4"	229	360	466	524	650	729	791	844	1038	1065	1285	1285	1640	1640	13'-4"
14'-0"	203	321	426	486	599	693	730	809	973	1012	1215	1215	1551	1551	14'-0"
16'-0"	215	284	386	530	492	653	688	775	1166	1236	1524	1524	1811	1811	16'-0"
18'-0"	157	211	286	400	367	494	519	588	891	946	1201	1336	1585	1585	18'-0"
18'-8"	142	192	260	365	334	452	474	539	818	869	1104	1282	1520	1520	18'-8"
20'-8"	104	145	195	281	254	350	365	518	641	682	869	1037	1267	1350	20'-8"
*22'-8"	76	133	185	279	280	352	389	444	561	718	721	1025	1042	1211	22'-3"
*24'-0"															24'-0"
*26'-0"															26'-0"

*Note: All lintels greater than 20'-8" in length will require (2)-#5 bars top or (2)-#5 bars top&bott.


PSBox8-8"
#5 TOP


PSBox8-8"
#5 TOP & BOT.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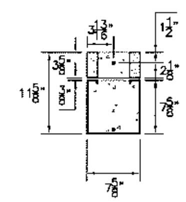
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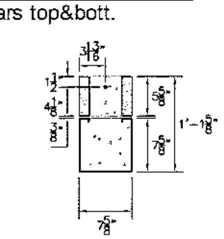
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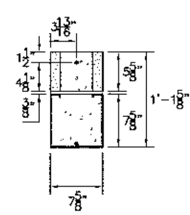
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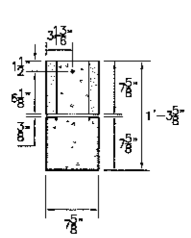
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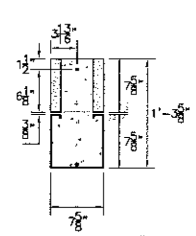
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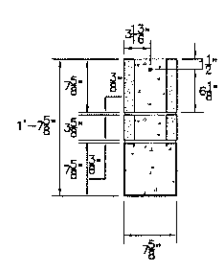
PSBox8-20"
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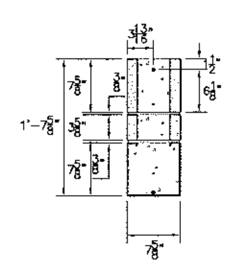
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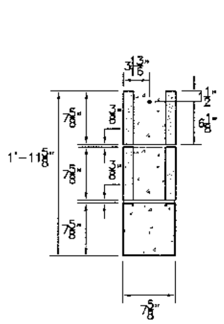
PSBox8-24"
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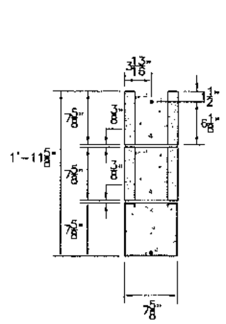
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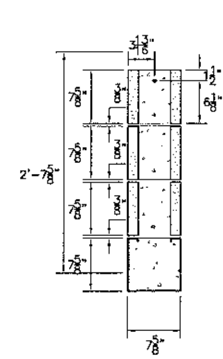
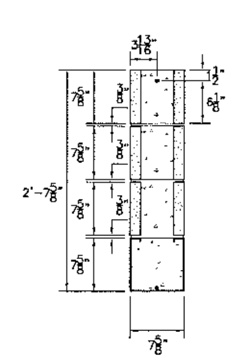

PSBox8-32"
#5 TOP


PSBox8-32"
#5 TOP & BOT.

GRAVITY LOADS

NOTES:

1. PRODUCT NAME (PATENT NO. 6367209);

   PREFORMED POWERS STEEL LINTEL SHALL BE GALVANIZED COIL STEEL AS MANUFACTURED BY POWERS STEEL AND WIRE PRODUCTS, INC. STEEL GRADE SHALL BE ASTM A570 GRADE C (FY = 40 ksi).

   NOTE: DEFORMATIONS DO NOT EFFECT STRUCTURAL CAPACITY.

   FOR SPANS LESS THAN 16'-0" BOX LINTELS TO BE 20 GA.

2. SHORE LINTELS AS REQUIRED TO COMPENSATE FOR DEAD LOAD DEFLECTION ON NON-CURED MASONRY GROUT. ALL LINTELS GREATER THAN 18'-0" ARE BUILT WITH 1/2" CAMBER.

3. LINTEL TO BE USED WITH CONCRETE MASONRY UNITS HAVING MINIMUM f'm AS SHOWN.

4. STEEL SURFACES IN CONTACT WITH GROUT AND/OR MORTAR SHALL BE UNPAINTED AND FREE OF MATERIAL THAT MIGHT INHIBIT BOND.

5. DESIGN BEARING OF POWERS STEEL LINTELS IS 8" FOR ALL LINTELS.

6. f'm = 1500 psi. MASONRY UNITS SHALL CONFORM TO ASTM C90, GRADE N.

7. GROUT = 3,000 psi. SLUMP RANGE: 8" TO 11". ROD OR VIBRATE GROUT ADEQUATELY TO ENSURE CONSOLIDATION OF GROUT (NO AIR POCKETS). GROUT SHALL COMPLY WITH ASTM C476 AND BE EITHER COARSE OR FINE GROUT.

8. MORTAR: TYPE "S" OR TYPE "M" 1800 psi.

9. TOP REINFORCING OR TOP OF WALL REINFORCING, IS REQUIRED BY CODES TO PROVIDE A CONTINUOUS TIE AROUND A STRUCTURE AND TO PROVIDE FOR UPLIFT RESISTANCE AT LINTELS.

10. ATTACHMENTS TO TOP OF WALL PER ARCHITECTURAL AND/OR ENGINEERING DRAWINGS.

11. LIMITATIONS:

    THE LINTELS SHALL NOT EXCEED THE ALLOWABLE DESIGN LOADS AND SPANS SHOWN IN THIS REPORT.

    THE LINTELS SHALL NOT BE USED IN A FIRE RESISTANCE RATED ASSEMBLY UNLESS A TEST REPORT DOCUMENTING FIRE RESISTANCE IS SUBMITTED TO THE BUILDING OFFICIAL.

    A PROPER BARRIER IS REQUIRED WHEN USING CORROSIVE LUMBER PRODUCTS IN CONTACT WITH THE STEEL LINTELS. A PROPER BARRIER WOULD BE A POLYETHYLENE BARRIER WITH A 10 MIL THICKNESS OR TO MAINTAIN A MIN. 1/4" SPACING BETWEEN THE CORROSIVE LUMBER AND STEEL LINTEL.

    LOAD TABLES (PSbox8MD) CAN BE USED IN THE HVHZ IN MIAMI OR BROWARD COUNTIES.

12. DEFLECTION LIMITS ARE SET TO L/600 FOR ALL LOADS SHOWN ABOVE THE DARKENED SOLID LINE. DEFLECTION LIMITS ARE SET TO L/360 [LIVE LOAD] AND L/240 [DEAD + LIVE LOAD] FOR ALL LOADS SHOWN BELOW DARKENED SOLID LINE.

13. ALL LOADS SHOWN IN TABLES ARE SUPERIMPOSED LOADS. TABLES ARE DATED 2/2016 AND CLEARLY INDICATE SUPERIMPOSED LOADS.

14. #5 REINFORCING BAR(S) GRADE 40 ARE TO SET APPROX. 1-1/2" FROM TOP OF ALL LINTEL DESIGNS AND IN SOME CASES THE BOTTOM OF STEEL LINTEL AS SHOWN ON LOAD TABLES. TOP HORIZONTAL REINFORCEMENT IS TO BE A CONTINUOUS TIE AS NOTED IN NOTE #9. IN THE CASE THAT THE LINTEL IS NOT WITHIN A COMPOSITE BOND BEAM SYSTEM, TOP HORIZONTAL REINFORCEMENT IS TO EXTEND 2'-0" PAST INSIDE OF JAMBS.

15. MANUFACTURER:

    POWERS STEEL
    4118 E. ELWOOD PHOENIX, AZ 85040
    PH# 602-437-1160 FAX# 602-437-5409

16. TECHNICAL DATA AND ENGINEERING POWERS LINTELS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE FOLLOWING:

    + FLORIDA BUILDING CODE 2014 (5th EDITION)
    + NASPEC / AISI LIGHT GAGE COLD FORMED STEEL DESIGN – 2007 (with 2010 SUPPLEMENT)
    + ACI 530-11 / ASCE 5-11 / TMS 402-11

    NOTE: THE EDITIONS OF THE REFERENCED CODES AND STANDARDS APPLICABLE TO THE USE OF THIS PRODUCT APPROVAL ARE AS STIPULATED IN THE ACCOMPANYING SEALED LETTER DATED 2/22/2016.

    STRUCTURAL ENGINEER FOR THESE LINTELS IS:

    S.E. CONSULTANTS, INC.
    5800 E. THOMAS RD. SUITE 104
    SCOTTSDALE, AZ 85251
    PHONE No. (480) 946-2010
    FAX (480) 946-1909

17. INSTALLATION:
    POWERS LINTELS ARE TO BE INSTALLED IN ACCORDANCE WITH STANDARD CONSTRUCTIONS PRACTICES, SET TO PROPER LINE AND LEVEL, PLUMB AND TRUE, AND IN CORRECT RELATION TO OTHER WORK.

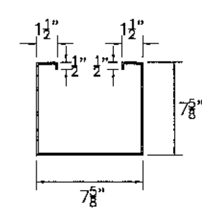
18. LINTELS LOADED SIMULTANEOUSLY WITH VERTICAL (GRAVITY OR UPLIFT) AND HORIZONTAL (LATERAL) LOADS SHOULD BE CHECKED FOR THE COMBINED LOADING WITH THE FOLLOWING EQUATION:

    $$\frac{\text{APPLIED VERTICAL LOAD}}{\text{SAFE VERTICAL LOAD}} + \frac{\text{APPLIED HORIZONAL LOAD}}{\text{SAFE HORIZONTAL LOAD}} \leq 1.0$$

19. FOR COMPOSITE LINTEL HEIGHTS NOT SHOWN, USE SAFE LOAD FROM NEXT LOWER HEIGHT SHOWN.

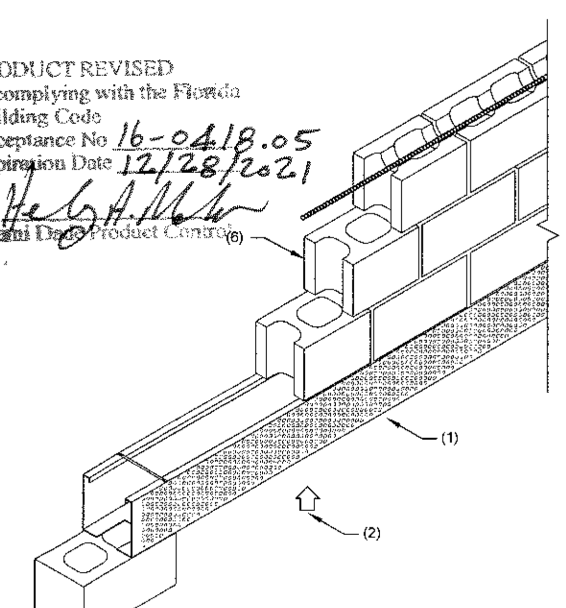
20. FOR LINTEL LENGTHS NOT SHOWN, USE SAFE LOAD FROM LONGEST LENGTH SHOWN.

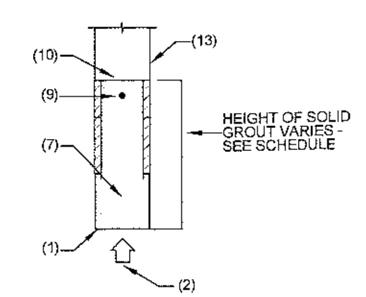
21. SAFE LOADS ARE SUPERIMPOSED ALLOWABLE LOADS.

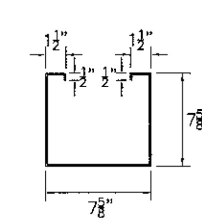


PSbox8 STEEL LINTELS
NOTE: NO SCALE
16 GAGE IS .0598 INCHES THICK.
20 GAGE IS .039 INCHES THICK.

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 16-0418.05
Expiration Date 12/28/2021
By
Miami Dade Product Control







TYPICAL POWER BOX LINTEL SECTION

STEVEN W. SCHAUB
LICENSE
No. 60509
STATE OF FLORIDA
PROFESSIONAL ENGINEER

JUL 20 2016

S.E. CONSULTANTS, Inc.
Structural Engineering Consultants
5800 East Thomas Road, Suite 104
Scottsdale, AZ 85251
(602)437-1160
Fax (602)437-5409

POWERS STEEL & WIRE
(602) 437-1160 FAX 437-5409

DETAILER
DATE FEB 2016
GRADE
DESCRIPTION GRAVITY LOADS
JOB NAME DADE COUNTY, FL (TABLE 2)
JOB NO. 0205-16
ADDRESS
CONTRACTOR
ARCHITECT
ENGINEER
DRWG NO.

PSbox8MD-II Lintels

8" inch block width (20ga. < 16'-0" span)

LINTEL LOAD TABLE (IN POUNDS PER LINEAL FOOT) (16ga. >= 16'-0" span)

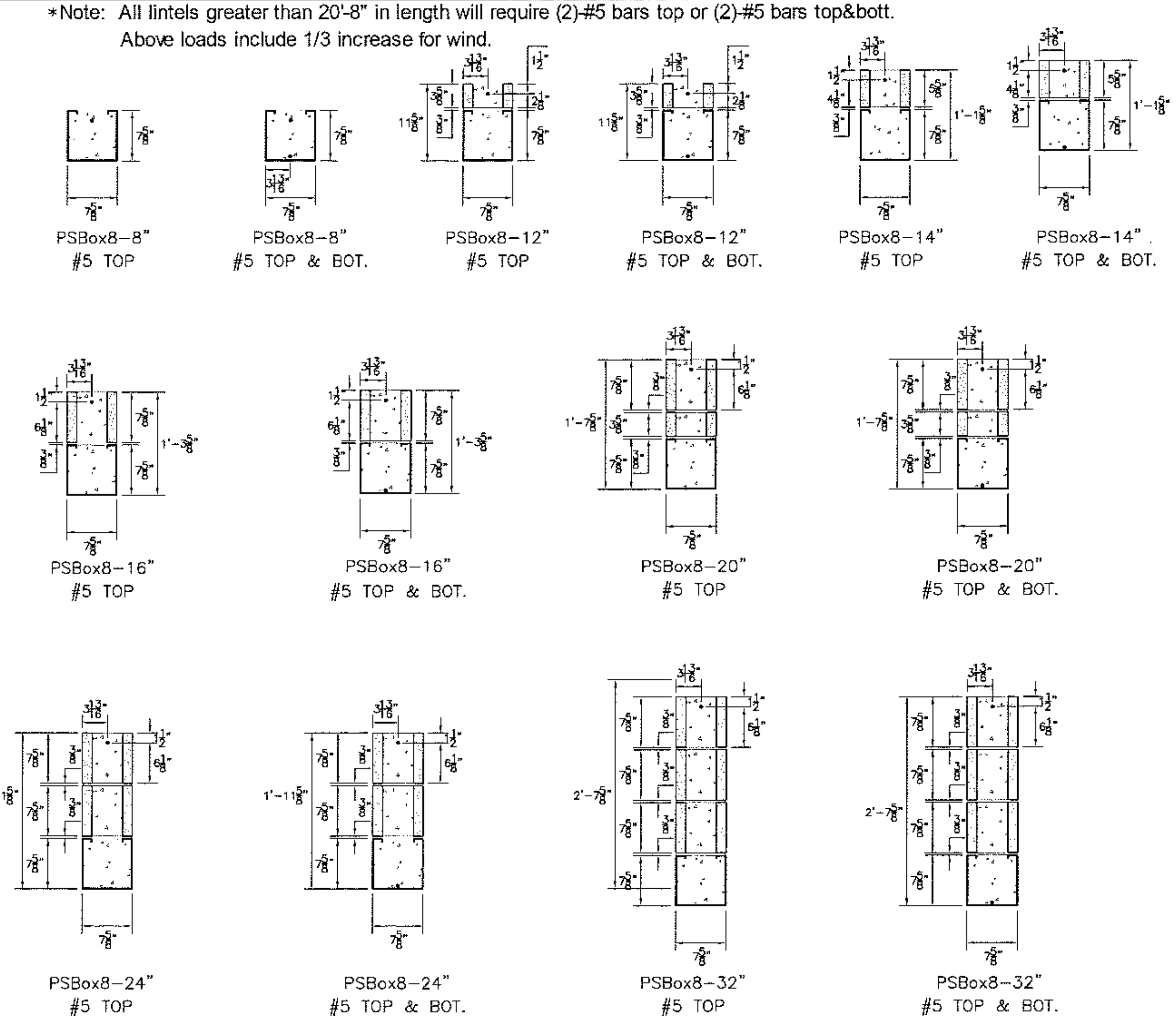
Lateral Load Table 3000 psi grout

— ALL LOADS ARE SUPERIMPOSED —

SPAN (ft)	PSbox 8-8" #5 top	PSbox 8-8" #5 top&bot	PSbox 8-12" #5 top	PSbox 8-12" #5 top&bot	PSbox 8-14" #5 top	PSbox 8-14" #5 top&bot	PSbox 8-16" #5 top	PSbox 8-16" #5 top&bot	PSbox 8-20" #5 top	PSbox 8-20" #5 top&bot	PSbox 8-24" #5 top	PSbox 8-24" #5 top&bot	PSbox 8-32" #5 top	PSbox 8-32" #5 top&bot	SPAN (ft)
1'-6"	3256	3256	4097	4097	4526	4526	4960	4960	5839	5839	6732	6732	8546	8546	1'-6"
2'-2"	2254	2254	2836	2836	3133	3133	3434	3434	4043	4043	4661	4661	5917	5917	2'-2"
2'-8"	1832	1832	2304	2304	2546	2546	2790	2790	3285	3285	3787	3787	4807	4807	2'-8"
3'-2"	1543	1543	1941	1941	2144	2144	2349	2349	2766	2766	3189	3189	4048	4048	3'-2"
4'-0"	1221	1221	1536	1536	1697	1697	1860	1860	2190	2190	2524	2524	3205	3205	4'-0"
4'-6"	1085	1085	1366	1366	1509	1509	1653	1653	1946	1946	2244	2244	2849	2849	4'-6"
5'-2"	945	945	1189	1189	1314	1314	1440	1440	1695	1695	1954	1954	2481	2481	5'-2"
6'-2"	792	792	996	996	1101	1101	1206	1206	1420	1420	1637	1637	1865	1926	6'-2"
7'-0"	698	698	878	878	970	970	1063	1063	1176	1204	1272	1306	1448	1495	7'-0"
8'-0"	611	611	738	749	781	794	822	838	901	922	974	1000	1108	1145	8'-0"
9'-2"	492	496	562	570	595	605	626	638	686	702	742	762	844	872	9'-2"
10'-0"	413	417	472	479	500	508	526	536	576	590	623	640	709	733	10'-0"
11'-2"	331	334	379	384	401	408	422	430	462	473	500	513	569	588	11'-2"
12'-0"	287	289	328	333	347	353	366	373	400	410	433	444	493	509	12'-0"
12'-8"	257	260	294	299	312	317	328	334	359	368	388	399	442	457	12'-8"
13'-4"	232	234	266	270	281	286	296	302	324	332	351	360	399	412	13'-4"
14'-0"	211	213	241	244	255	259	269	274	294	301	318	326	362	374	14'-0"
16'-0"	271	272	296	298	308	310	319	322	341	344	361	366	399	405	16'-0"
18'-0"	214	215	234	235	243	245	252	254	269	272	285	289	315	320	18'-0"
18'-8"	199	200	218	219	226	228	235	236	250	253	265	269	293	298	18'-8"
20'-8"	162	163	177	178	185	186	191	193	204	206	216	219	239	243	20'-8"
*22'-8"	135	136	148	150	154	156	160	162	172	174	182	186	202	207	22'-8"
*24'-0"															24'-0"
*26'-0"															26'-0"

*Note: All lintels greater than 20'-8" in length will require (2)-#5 bars top or (2)-#5 bars top&bott.

Above loads include 1/3 increase for wind.



LATERAL LOADS

NOTES:

1. PRODUCT NAME (PATENT NO. 6367209)

   PREFORMED POWERS STEEL LINTEL SHALL BE GALVANIZED COIL STEEL AS MANUFACTURED BY POWERS STEEL AND WIRE PRODUCTS, INC. STEEL GRADE SHALL BE ASTM A570 GRADE C (FY = 40 ksi).

   NOTE: DEFORMATIONS DO NOT EFFECT STRUCTURAL CAPACITY.

   FOR SPANS LESS THAN 16'-0" BOX LINTELS TO BE 20 GA.

2. SHORE LINTELS AS REQUIRED TO COMPENSATE FOR DEAD LOAD DEFLECTION ON NON-CURED MASONRY GROUT. ALL LINTELS GREATER THAN 18'-0" ARE BUILT WITH 1/2" CAMBER.

3. LINTEL TO BE USED WITH CONCRETE MASONRY UNITS HAVING MINIMUM fm AS SHOWN.

4. STEEL SURFACES IN CONTACT WITH GROUT AND/OR MORTAR SHALL BE UNPAINTED AND FREE OF MATERIAL THAT MIGHT INHIBIT BOND.

5. DESIGN BEARING OF POWERS STEEL LINTELS IS 8" FOR ALL LINTELS.

6. fm = 1500 psi. MASONRY UNITS SHALL CONFORM TO ASTM C90, GRADE N.

7. GROUT = 3,000 psi. SLUMP RANGE: 8" TO 11". ROD OR VIBRATE GROUT ADEQUATELY TO ENSURE CONSOLIDATION OF GROUT (NO AIR POCKETS). GROUT SHALL COMPLY WITH ASTM C476 AND BE EITHER COARSE OR FINE GROUT.

8. MORTAR: TYPE "S" OR TYPE "M" 1800 psi.

9. TOP REINFORCING OR TOP OF WALL REINFORCING, IS REQUIRED BY CODES TO PROVIDE A CONTINUOUS TIE AROUND A STRUCTURE AND TO PROVIDE FOR UPLIFT RESISTANCE AT LINTELS.

10. ATTACHMENTS TO TOP OF WALL PER ARCHITECTURAL AND/OR ENGINEERING DRAWINGS.

11. LIMITATIONS:

    THE LINTELS SHALL NOT BE USED IN A FIRE RESISTANCE RATED ASSEMBLY UNLESS A TEST REPORT DOCUMENTING FIRE RESISTANCE IS SUBMITTED TO THE BUILDING OFFICIAL.

    A PROPER BARRIER IS REQUIRED WHEN USING CORROSIVE LUMBER PRODUCTS IN CONTACT WITH THE STEEL LINTELS. A PROPER BARRIER WOULD BE A POLYETHYLENE BARRIER WITH A 10 MIL THICKNESS OR TO MAINTAIN A MIN. 1/4" SPACING BETWEEN THE CORROSIVE LUMBER AND STEEL LINTEL.

    LOAD TABLE (PSbox8MD) CAN BE USED IN THE HVHZ IN MIAMI OR BROWARD COUNTIES.

12. ALLOWABLE LOADS SHOWN IN THE TABLES FOR UPLIFT AND LATERAL LOAD CAPACITY INCLUDE A 1/3 INCREASE FOR WIND OR SEISMIC LOADING WITH NO FURTHER INCREASES ALLOWED. IF COMBINED LOADING CONDITIONS ARE APPLIED TO THE LINTELS FOR SIMULTANEOUS LOADING DIRECTIONS, THE ALLOWABLE LOADS SHOWN IN THE TABLES MUST BE ADJUSTED USING A UNITY EQUATION.

13. ALL LOADS SHOWN IN TABLES ARE SUPERIMPOSED LOADS. TABLES ARE DATED 2/2016 AND CLEARLY INDICATE SUPERIMPOSED LOADS.

14. #5 REINFORCING BAR (GRADE 40) IS TO SET APPROX. 1-1/2" FROM TOP OF ALL LINTEL DESIGNS AND IN SOME CASES THE BOTTOM OF STEEL LINTEL AS SHOWN ON LOAD TABLES. TOP HORIZONTAL REINFORCEMENT IS TO BE A CONTINUOUS TIE AS NOTED IN NOTE #9. IN THE CASE THAT THE LINTEL IS NOT WITHIN A COMPOSITE BOND BEAM SYSTEM, TOP HORIZONTAL REINFORCEMENT IS TO EXTEND 2'-0" PAST INSIDE OF JAMBS.

15. MANUFACTURER:

    POWERS STEEL
    4118 E. ELWOOD PHOENIX, AZ 85040
    PH# 602-437-1160 FAX# 602-437-5409

16. TECHNICAL DATA AND ENGINEERING POWERS LINTELS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE FOLLOWING:

    + FLORIDA BUILDING CODE 2014 (5th EDITION)
    + NASPEC / AISI LIGHT GAGE COLD FORMED STEEL DESIGN – 2007 (with 2010 SUPPLEMENT)
    + ACI 530-11 / ASCE 5-11 / TMS 402-11

    NOTE: THE EDITIONS OF THE REFERENCED CODES AND STANDARDS APPLICABLE TO THE USE OF THIS PRODUCT APPROVAL ARE AS STIPULATED IN THE ACCOMPANYING SEALED LETTER DATED 2/22/2016.

    STRUCTURAL ENGINEER FOR THESE LINTELS IS:

    S.E. CONSULTANTS, INC.
    5800 E. THOMAS RD. SUITE 104
    SCOTTSDALE, AZ 85251
    PHONE No. (480) 946-2010
    FAX (480) 946-1909

17. INSTALLATION:
    POWERS LINTELS ARE TO BE INSTALLED IN ACCORDANCE WITH STANDARD CONSTRUCTIONS PRACTICES, SET TO PROPER LINE AND LEVEL, PLUMB AND TRUE, AND IN CORRECT RELATION TO OTHER WORK.

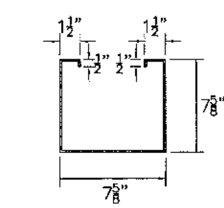
18. LINTELS LOADED SIMULTANEOUSLY WITH VERTICAL (GRAVITY OR UPLIFT) AND HORIZONTAL (LATERAL) LOADS SHOULD BE CHECKED FOR THE COMBINED LOADING WITH THE FOLLOWING EQUATION:

    $$\frac{\text{APPLIED VERTICAL LOAD}}{\text{SAFE VERTICAL LOAD}} + \frac{\text{APPLIED HORIZONAL LOAD}}{\text{SAFE HORIZONTAL LOAD}} \leq 1.0$$

19. FOR COMPOSITE LINTEL HEIGHTS NOT SHOWN, USE SAFE LOAD FROM NEXT LOWER HEIGHT SHOWN.

20. FOR LINTEL LENGTHS NOT SHOWN, USE SAFE LOAD FROM LONGEST LENGTH SHOWN.

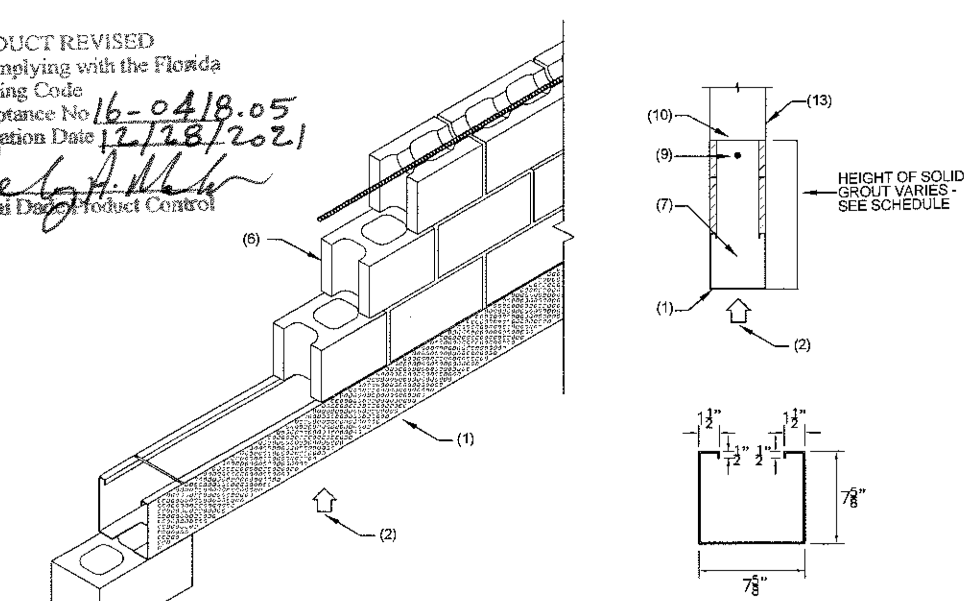
21. SAFE LOADS ARE SUPERIMPOSED ALLOWABLE LOADS.



PSbox8 STEEL LINTELS

NOTE: NO SCALE
16 GAGE IS .0598 INCHES THICK.
20 GAGE IS .039 INCHES THICK.

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 16-0418.05
Expiration Date 12/28/2021
By
Miami Dade Product Control



TYPICAL POWER BOX LINTEL SECTION

STEVEN M. SCHAUB
LICENSE
No. 60509
STATE OF FLORIDA
PROFESSIONAL ENGINEER

JUL 20 2016

S.E. CONSULTANTS, Inc.
Structural Engineering Consultants
5800 East Thomas Road, Suite 104
Scottsdale, AZ 85251
(602)437-1160
Fax (602)437-5409

POWERS STEEL & WIRE
(602) 437-1160 FAX 437-5409

JOB NAME	DADE COUNTY, FL (TABLE 2)
JOB NO.	0205-16
ADDRESS	
CONTRACTOR	
DESCRIPTION	LATERAL LOADS
ARCHITECT	
ENGINEER	
DETAILER	
DATE	FEB 2016
GRADE	
DRWG NO.	

NO.	REVISION	BY	DATE

PSbox8MD-II Lintels

8" inch block width (20ga. < 16'-0" span)

LINTEL LOAD TABLE (IN POUNDS PER LINEAL FOOT) (16ga. >= 16'-0" span)

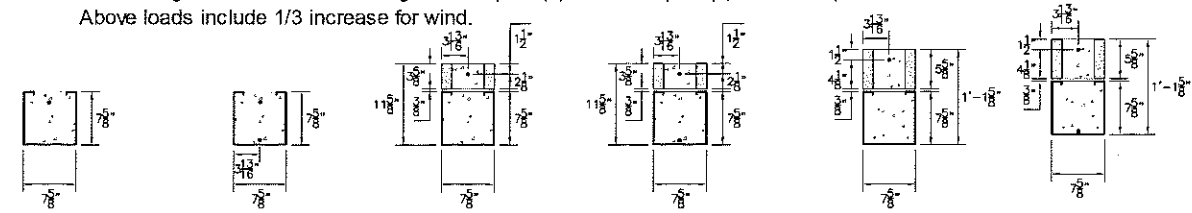
Uplift Load Table 3000 psi grout

— ALL LOADS ARE SUPERIMPOSED —

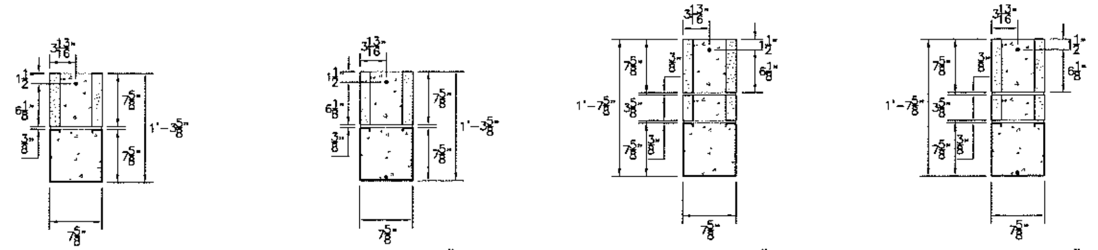
SPAN (ft)	PSbox 8-8" #5 top	PSbox 8-8" #5 top&bot	PSbox 8-12" #5 top	PSbox 8-12" #5 top&bot	PSbox 8-14" #5 top	PSbox 8-14" #5 top&bot	PSbox 8-16" #5 top	PSbox 8-16" #5 top&bot	PSbox 8-20" #5 top	PSbox 8-20" #5 top&bot	PSbox 8-24" #5 top	PSbox 8-24" #5 top&bot	PSbox 8-32" #5 top	PSbox 8-32" #5 top&bot	SPAN (ft)
1'-6"	5637	5637	7585	7585	8570	8570	9561	9561							1'-6"
2'-2"	3914	3914	5267	5267	5952	5952	6640	6640	8026	8026	9420	9420	12226	12226	2'-2"
2'-8"	3187	3187	4289	4289	4847	4847	5408	5408	6537	6537	7673	7673	9959	9959	2'-8"
3'-2"	2689	2689	3620	3620	4091	4091	4565	4565	5518	5518	6478	6478	8408	8408	3'-2"
4'-0"	2136	2136	2877	2877	3252	3252	3629	3629	4387	4387	5150	5150	6685	6685	4'-0"
4'-6"	1903	1903	2563	2563	2897	2897	3233	3233	3909	3909	4589	4589	5957	5957	4'-6"
5'-2"	1662	1662	2239	2239	2531	2531	2825	2825	3416	3416	4010	4010	5206	5206	5'-2"
6'-2"	1398	1398	1885	1885	2131	2131	2378	2378	2876	2876	3376	3376	4384	4384	6'-2"
7'-0"	1236	1236	1667	1667	1884	1884	2103	2103	2544	2544	2987	2987	3878	3878	7'-0"
8'-0"	959	959	1365	1365	1533	1533	1703	1703	2044	2044	2387	2387	3077	3077	8'-0"
9'-2"	739	739	1052	1052	1182	1182	1313	1313	1577	1577	1843	1843	2376	2376	9'-2"
10'-0"	626	626	892	892	1003	1003	1115	1115	1339	1339	1565	1565	2019	2019	10'-0"
11'-2"	509	509	726	726	817	817	908	908	1091	1091	1275	1275	1646	1646	11'-2"
12'-0"	446	446	636	636	715	715	795	795	956	956	1118	1118	1444	1444	12'-0"
12'-8"	404	404	576	576	648	648	721	721	867	867	1014	1014	1310	1310	12'-8"
13'-4"	368	368	525	525	591	591	657	657	791	791	925	925	1195	1195	13'-4"
14'-0"	337	337	481	481	542	542	603	603	725	725	849	849	1097	1097	14'-0"
16'-0"	347	347	461	461	509	509	558	558	656	656	754	754	952	952	16'-0"
18'-0"	282	282	376	376	416	416	456	456	537	537	618	618	781	781	18'-0"
18'-8"	265	265	353	353	391	391	429	429	505	505	582	582	736	736	18'-8"
20'-8"	223	223	298	298	330	330	363	363	428	428	494	494	626	626	20'-8"
*22'-8"	202	202	298	298	356	356	418	418	538	538	634	634	828	828	22'-8"
*24'-0"															24'-0"
*26'-0"															26'-0"

*Note: All lintels greater than 20'-8" in length will require (2)-#5 bars top or (2)-#5 bars top&bott.

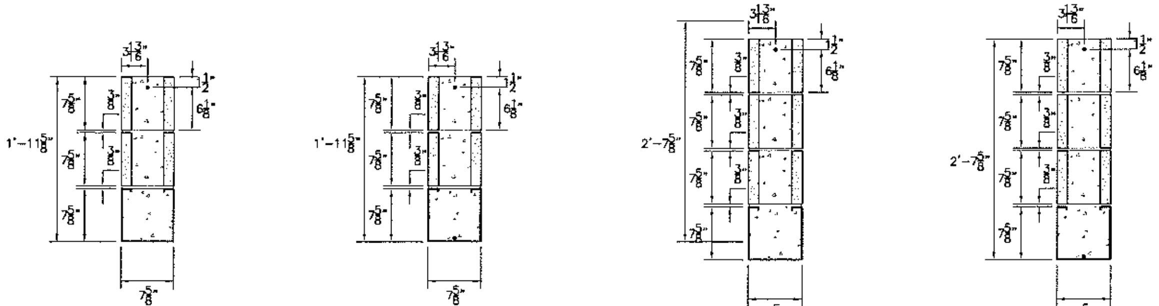
Above loads include 1/3 increase for wind.



PSBox8–8" #5 TOP | PSBox8–8" #5 TOP & BOT. | PSBox8–12" #5 TOP | PSBox8–12" #5 TOP & BOT. | PSBox8–14" #5 TOP | PSBox8–14" #5 TOP & BOT.



PSBox8–16" #5 TOP | PSBox8–16" #5 TOP & BOT. | PSBox8–20" #5 TOP | PSBox8–20" #5 TOP & BOT.



PSBox8–24" #5 TOP | PSBox8–24" #5 TOP & BOT. | PSBox8–32" #5 TOP | PSBox8–32" #5 TOP & BOT.

UPLIFT LOADS

NOTES:

1. PRODUCT NAME (PATENT NO. 6367209)

   PREFORMED POWERS STEEL LINTEL SHALL BE GALVANIZED COIL STEEL AS MANUFACTURED BY POWERS STEEL AND WIRE PRODUCTS, INC. STEEL GRADE SHALL BE ASTM A570 GRADE C (FY = 40 ksi).

   NOTE: DEFORMATIONS DO NOT EFFECT STRUCTURAL CAPACITY.

   FOR SPANS LESS THAN 16'-0" BOX LINTELS TO BE 20 GA.

2. SHORE LINTELS AS REQUIRED TO COMPENSATE FOR DEAD LOAD DEFLECTION ON NON-CURED MASONRY GROUT. ALL LINTELS GREATER THAN 18'-0" ARE BUILT WITH 1/2" CAMBER.

3. LINTEL TO BE USED WITH CONCRETE MASONRY UNITS HAVING MINIMUM f'm AS SHOWN.

4. STEEL SURFACES IN CONTACT WITH GROUT AND/OR MORTAR SHALL BE UNPAINTED AND FREE OF MATERIAL THAT MIGHT INHIBIT BOND.

5. DESIGN BEARING OF POWERS STEEL LINTELS IS 8" FOR ALL LINTELS.

6. f'm = 1500 psi. MASONRY UNITS SHALL CONFORM TO ASTM C90, GRADE N.

7. GROUT = 3,000 psi. SLUMP RANGE: 8" TO 11". ROD OR VIBRATE GROUT ADEQUATELY TO ENSURE CONSOLIDATION OF GROUT (NO AIR POCKETS). GROUT SHALL COMPLY WITH ASTM C476 AND BE EITHER COARSE OR FINE GROUT.

8. MORTAR: TYPE "S" OR TYPE "M" 1800 psi.

9. TOP REINFORCING OR TOP OF WALL REINFORCING. IS REQUIRED BY CODES TO PROVIDE A CONTINUOUS TIE AROUND A STRUCTURE AND TO PROVIDE FOR UPLIFT RESISTANCE AT LINTELS.

10. ATTACHMENTS TO TOP OF WALL PER ARCHITECTURAL AND/OR ENGINEERING DRAWINGS.

11. LIMITATIONS:

    THE LINTELS SHALL NOT BE USED IN A FIRE RESISTANCE RATED ASSEMBLY UNLESS A TEST REPORT DOCUMENTING FIRE RESISTANCE IS SUBMITTED TO THE BUILDING OFFICIAL.

    A PROPER BARRIER IS REQUIRED WHEN USING CORROSIVE LUMBER PRODUCTS IN CONTACT WITH THE STEEL LINTELS. A PROPER BARRIER WOULD BE A POLYETHYLENE BARRIER WITH A 10 MIL THICKNESS OR TO MAINTAIN A MIN. 1/4" SPACING BETWEEN THE CORROSIVE LUMBER AND STEEL LINTEL

    LOAD TABLE (PSbox8MD) CAN BE USED IN THE HVHZ IN MIAMI OR BROWARD COUNTIES.

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15. MANUFACTURER:

    POWERS STEEL
    4118 E. ELWOOD PHOENIX, AZ 85040
    PH# 602-437-1160 FAX# 602-437-5409

16. TECHNICAL DATA AND ENGINEERING POWERS LINTELS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE FOLLOWING:

    + FLORIDA BUILDING CODE 2014 (5th EDITION)
    + NASPEC / AISI LIGHT GAGE COLD FORMED STEEL DESIGN – 2007 (with 2010 SUPPLEMENT)
    + ACI 530-11 / ASCE 5-11 / TMS 402-11

    NOTE: THE EDITIONS OF THE REFERENCED CODES AND STANDARDS APPLICABLE TO THE USE OF THIS PRODUCT APPROVAL ARE AS STIPULATED IN THE ACCOMPANYING SEALED LETTER DATED 2/22/2016.

    STRUCTURAL ENGINEER FOR THESE LINTELS IS:

    S.E. CONSULTANTS, INC.
    5800 E. THOMAS RD. SUITE 104
    SCOTTSDALE, AZ 85251
    PHONE No. (480) 946-2010
    FAX (480) 946-1909

17. INSTALLATION:
    POWERS LINTELS ARE TO BE INSTALLED IN ACCORDANCE WITH STANDARD CONSTRUCTIONS PRACTICES, SET TO PROPER LINE AND LEVEL, PLUMB AND TRUE. AND IN CORRECT RELATION TO OTHER WORK.

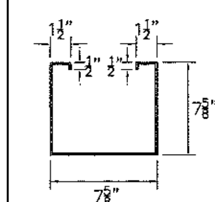
18. LINTELS LOADED SIMULTANEOUSLY WITH VERTICAL (GRAVITY OR UPLIFT) AND HORIZONTAL (LATERAL) LOADS SHOULD BE CHECKED FOR THE COMBINED LOADING WITH THE FOLLOWING EQUATION:

$$\frac{\text{APPLIED VERTICAL LOAD}}{\text{SAFE VERTICAL LOAD}} + \frac{\text{APPLIED HORIZONAL LOAD}}{\text{SAFE HORIZONTAL LOAD}} \leq 1.0$$

19. FOR COMPOSITE LINTEL HEIGHTS NOT SHOWN, USE SAFE LOAD FROM NEXT LOWER HEIGHT SHOWN.

20. FOR LINTEL LENGTHS NOT SHOWN, USE SAFE LOAD FROM LONGEST LENGTH SHOWN.

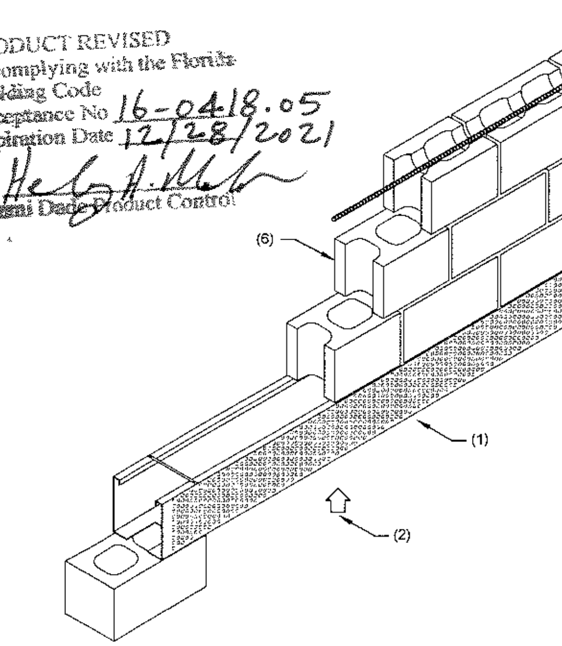
21. SAFE LOADS ARE SUPERIMPOSED ALLOWABLE LOADS.

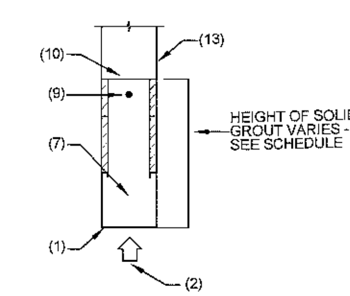


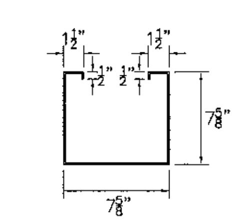
PSbox8 STEEL LINTELS

NOTE: NO SCALE
16 GAGE IS .0598 INCHES THICK.
20 GAGE IS .039 INCHES THICK.

PRODUCT REVISED as complying with the Florida Building Code
Acceptance No 16-0418.05
Expiration Date 12/28/2021
By [signature]
Miami Dade Product Control







TYPICAL POWER BOX LINTEL SECTION

STEVEN W. SCHAUB LICENSE No. 60509 STATE OF FLORIDA PROFESSIONAL ENGINEER

JUL 2 0 2016

S.E. CONSULTANTS, Inc.
Structural Engineering Consultants
5800 East Thomas Road, Suite 104
Scottsdale, AZ 85251
(602)437-1160
Fax (602)437-5409

JOB NAME	DADE COUNTY, FL (TABLE 2)
JOB NO.	0205-16
ADDRESS	
CONTRACTOR	
DRWG NO.	
DESCRIPTION	UPLIFT LOADS
ARCHITECT	
ENGINEER	
DETAILER	
DATE	FEB 2016
GRADE	
NO.	
REVISION	
BY	
DATE	

POWERS STEEL & WIRE
(602) 437-1160 FAX 437-5409